

STUDY TITLE: Update of Select Environmental Information for Norton Basin, Chukchi/Hope Basin and Cook Inlet Planning Areas for the Alaska Outer Continental Shelf (OCS) Region

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CONTRACT NUMBER: 0103CT71930

SPONSORING OCS REGION: Alaska

APPLICABLE PLANNING AREAS: Norton Basin, Chukchi/Hope Basin, and Cook Inlet

FISCAL YEARS OF PROJECT FUNDING: 2004, 2005

COMPLETION DATE OF REPORT: March 25, 2005

COST: FY 2004:\$125,226; FY 2005: \$24,729; CUMULATIVE PROJECT COST: \$149,956

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KEY WORDS: Norton Basin, Chukchi/Hope Basin, Cook Inlet, Annotated Bibliography, protected species, oil and gas development, Environmental Information

BACKGROUND: The National Environmental Policy Act (NEPA) of 1969 (42 USC 4321-4347) requires that all federal agencies use a systematic, interdisciplinary approach to ensure the integrated use of the natural and social sciences in all planning and decision making that may have an effect on the human environment. To meet the goals established by NEPA MMS efforts include, Environmental Impact Statements, Environmental Assessment teams, studies that acquire and analyze marine environmental data, literature surveys, socioeconomic-analysis studies, public conferences and special studies.

OBJECTIVES: The project objective was to conduct specialized literature surveys of the primary published literature, the gray literature published by industry and government, published web pages and other potential sources of new scientific information (within the past 5-10 years) on fish, marine mammals, marine birds, ecosystems, and human social systems that might be affected by oil and gas development on

the Alaskan Outer Continental Shelf. This information was compiled into an annotated ProCite bibliography that provides the location (bibliographic reference) and description or summary of the new scientific information available from the above sources.

DESCRIPTION: Task 1. Norton Sound Protected Species Literature Update (1991-2003): LGL identified new literature and other available information on endangered and threatened species in the Norton Sound region. We contacted various sources at the United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), Alaska Department of Fish and Game (ADFG) and other sources to identify new information on species status, critical habitats, and responses of sensitive species to development. The review covers new information since the most recent OCS Environmental Impact Statement OCS EIS/EA MMS 90-0009, Norton Sound OCS Mining Program Final Environmental Impact Statement, March 1991 and includes information through December 2004.

Task 2. Chukchi Sea and Hope Basin Literature Update (1991-2003): LGL conducted a survey to identify new scientific literature and other relevant information on fish, marine mammals, marine birds, ecosystems, and human social systems that might be affected by oil and gas development in the Chukchi Sea and Hope Basin OCS Planning Areas. This literature survey focused on information that has become available since OCS EIS/EA MMS 90-0095, Chukchi Lease Sale 126 Final Environmental Impact Statement released in January 1991 and is current through December 2004.

Task 3. Cook Inlet Region Fisheries Literature Update (1998-2005): LGL conducted a survey of new literature and other scientific information on fisheries that might be affected by oil and gas development in the Cook Inlet OCS. The literature survey concentrated on information made available since the release of OCS EIS/EA MMS 2002-065, Cook Inlet Planning Area Oil and Gas Lease Sales 191 and 199 Draft Environmental Impact Statement, December 2002. This survey addressed Cook Inlet specific topics and emphasized:

- (a) Geographic and seasonal distribution and abundance of fish in Cook Inlet with emphasis on identifying sources of information that can be incorporated by MMS into GIS layers for modeling the effects of oil spills.
- (b) Geographic and water column locations of Cook Inlet salmon between smolt and returning adult.
- (c) Socioeconomics of commercial fishing in Cook Inlet, including relationships to offshore oil and gas development.

For all three tasks we prepared annotated bibliographic entries for each of the documents and information sources identified. The bibliography was produced in Pro-Cite and is fully searchable by author, subject, title, and keywords.

SIGNIFICANT CONCLUSIONS: There is a substantial amount of new information associated with each of the Planning Areas. Accumulating the information in a searchable database should help make the information more accessible.

STUDY RESULTS: A large number of references to new scientific information were catalogued in a ProCite database searchable by keywords, authors, subjects, and titles.

STUDY PRODUCTS:

LGL Alaska Research Associates, Inc. 2005. Update of Select Environmental Information for the Alaska Outer Continental Shelf (OCS) Region: Norton Sound Protected Species Literature Update (1991-2004). Final Report and Annotated Bibliography on CD prepared by LGL Alaska Research Associates, Inc., for the U. S. Department of the Interior, Minerals Management Service, Alaska OCS Region, Anchorage, AK Contract No. 0103CT71930. 6 pp. + CD.

LGL Alaska Research Associates, Inc. 2005. Update of Select Environmental Information for the Alaska Outer Continental Shelf (OCS) Region: Chukchi/Hope Basin Literature Update (1991-2004). Final Report and Annotated Bibliography on CD prepared by LGL Alaska Research Associates, Inc., for the U. S. Department of the Interior, Minerals Management Service, Alaska OCS Region, Anchorage, AK Contract No. 0103CT71930. 7 pp. + CD.

LGL Alaska Research Associates, Inc. 2005. Update of Select Environmental Information for the Alaska Outer Continental Shelf (OCS) Region: Cook Inlet Planning Area Literature Update (1998-2004). Final Report and Annotated Bibliography on CD prepared by LGL Alaska Research Associates, Inc., for the U. S. Department of the Interior, Minerals Management Service, Alaska OCS Region, Anchorage, AK Contract No. 0103CT71930. 7 pp. + CD.

MAP SHOWING AREA OF STUDY: A map showing the location of the OCS Planning Areas in Alaska is attached.